

WHAT IS CLAIMED IS:

1. A process comprising the steps of feeding at least a single continuous web in a machine direction as a component member of a disposable wearing article being continuously manufactured, feeding continuous elastic members toward at least one surface of said web while said continuous elastic members are oscillated in a cross direction relative to said machine direction, and attaching said continuous elastic members in a stretched state to said one surface in a accordance with a desired layout, said process further comprising the steps of:

feeding said web to a nip between a pair of press rolls substantially being in contact with each other and adapted to 15 rotate in said machine direction around respective axes extending parallel to each other in said cross direction; and

feeding said elastic members from upstream of said pair of press rolls to the nip between said press rolls via guide means adapted to oscillate said elastic members in said cross 20 direction and attaching said elastic members to said web by means of an adhesive;

wherein each of said guide means comprises:

a motor having a rotary shaft extending in a direction

crossing said axes and adapted to repeat reversal of its rotational direction;

an arm connected directly with said rotary shaft and extending in a direction crossing said rotary shaft, said arm 5 being formed on its distal end with guide means adapted for passage of said elastic members, and said arm being adapted to swing around said rotary shaft as said rotary shaft rotates; and

10 at least one feed member located upstream of said rotary shaft as viewed in said machine direction and adapted to direct said elastic members toward said guide means; and

wherein, in the course of running from said feed member to said pair of press rolls via said guide means, said elastic members are attached to said web while said elastic members are 15 oscillated in said cross direction by said arm connected directly with said rotary shaft so as to repeat reversal of its swinging direction.

2. The process according to Claim 1, wherein a servomotor 20 is used as said motor.

3. The process according to Claim 2, wherein said servomotor is actuated by a controller containing therein a program adapted

to rotate said servomotor on the basis of a running speed of at least said web in said machine direction and said layout desired for said elastic members.

5 4. The process according to any one of Claims 1 through 3, wherein said arm is formed from a composite material comprising any one selected from the group consisting of carbon fiber, glass fiber, metallic fiber, synthetic fiber, semi-synthetic fiber and natural fiber and any one selected from the group 10 consisting of thermoplastic synthetic resin and thermosetting synthetic resin.

5. The process according to any one of Claims 1 through 4, wherein said axes of said pair of press rolls extend in a 15 horizontal direction, said rotary shaft of said motor extends in a vertical direction and said arm extends in said horizontal direction from said rotary shaft toward said nip between said pair of press rolls.

20 6. The process according to any one of Claims 1 through 5, wherein said elastic members are directed from said guide means to said nip between said pair of press rolls so that said elastic members is in coincide with a tangential line with respect to

a region in which said pair of press rolls substantially contact each other.

7. The process according to Claim 5 or 6, wherein said
5 elastic members extend from said feed member to said guide means
at a deviation angle of 10° or less relative to said horizontal
direction.

8. An apparatus for feeding at least a single continuous web
10 in a machine direction as a component member of a disposable
wearing article being continuously manufactured, feeding
continuous elastic members toward at least one surface of said
web while said continuous elastic members are oscillated in a
cross direction relative to said machine direction, and
15 attaching said continuous elastic members in a stretched state
to said one surface in accordance with a desired layout, said
apparatus comprising:

20 a pair of press rolls extending parallel to each other
and substantially contacting each other, said pair of press
rolls rotating in said machine direction around respective axes
extending in said cross direction so as to feed said web in said
machine direction, and a guide means located upstream of said
pair of said press rolls as viewed in said machine direction

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to oscillate said elastic members in said cross direction;

wherein each of said guide means comprises:

a motor having a rotary shaft extending in a direction crossing said axes and adapted to repeat reversal of its
5 rotational direction;

an arm connected directly with said rotary shaft and extending in a direction crossing said rotary shaft, said arm being formed on its distal end with said guide means adapted for passage of said elastic members, and said arm being adapted

10 to swing around said rotary shaft as said rotary shaft rotates; and

at least one feed member located upstream of said rotary shaft as viewed in said machine direction and adapted to direct said elastic members toward said guide means.

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9. The apparatus according to Claim 8, wherein said motor is a servomotor.

10. The apparatus according to Claim 9, wherein said
20 servomotor is electrically connected with a controller containing therein a program adapted to rotate said servomotor on the basis of a running speed of at least said web in said machine direction and said layout desired for said elastic

members.

11. The apparatus according to any one of Claims 8 through 11, wherein said arm contains a composite material comprising 5 any one selected from the group consisting of carbon fiber, glass fiber, metallic fiber, synthetic fiber, semi-synthetic fiber and natural fiber and any one selected from the group consisting of thermoplastic synthetic resin and thermosetting synthetic resin.

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12. The apparatus according to any one of Claims 8 through 11, wherein said axes of said pair of press rolls extend in a horizontal direction, said rotary shaft of said motor extends in a vertical direction and said arm extends in said horizontal 15 direction from said rotary shaft toward said nip between said pair of press rolls.

13. The apparatus according to any one of Claims 8 through 12, wherein said arm extends substantially in coincide with a 20 tangential line with respect to a region in which said pair of press rolls substantially contact each other.

14. The apparatus according to any one of Claims 8 through

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13, wherein said feed member and said guide means are located so that said elastic members extend from said feed member to said guide means at a deviation angle of 10° or less relative to said horizontal direction.